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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/799,142	03/11/2004	Akira Sugiyama	61,023 (48882)	7905
7590	11/30/2005			
David G. Conlin Edwards & Angell, LLP P. O. Box 55874 Boston, MA 02205			EXAMINER GREENHUT, CHARLES N	
			ART UNIT 3652	PAPER NUMBER

DATE MAILED: 11/30/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/799,142	Applicant(s) SUGIYAMA ET AL.	
	Examiner Charles N. Greenhut	Art Unit 3652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-6 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>3-11-04</u> . | 6) <input type="checkbox"/> Other: ____ |

I. Claim Rejections - 35 USC § 112

The following is a quotation from the relevant paragraphs of 35 U.S.C. 112:

(2) The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

1. Claims 1-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

1.1. With respect to claims 1-4, the term “and/or” used throughout the claims is indefinite because it is not clear whether applicant means “and” or “or.”

1.2. With respect to claim 1, the term “at least one plurality of elevator pins” is indefinite because it is not clear whether applicant requires at least one elevator pin or a plurality thereof.

1.3. With respect to claims 1 and 2, the term “at least one plurality of transport stages” is indefinite because it is not clear whether applicant requires at least one transport stage or a plurality thereof.

1.4. With respect to claim 1, the phrase “at least one of the workpiece or workpieces,” in line 7 is indefinite because it is unclear how many workpieces are required. Furthermore, this term lacks antecedent basis because a workpiece, workpieces or at least one workpiece has never been positively recited within the claim, but merely included as the object of a functional recitation.

1.5. The claims are ambiguous because in multiple instances applicant recites elements in both the singular or plural, e.g., “rotating at least one of the transport stages which is or are upstream.” Such language makes it impossible to determine the metes and

bounds of the claimed invention. If applicant wishes to include in his claim either one or more of an element he should use language such as, "one or more transport stage" or "at least one elevator pin." If applicant wishes only to include the plural of an element he should use language such as, "a plurality of elevator pins." Subsequent references should be consistent with the chosen language, for example, "said at least one elevator pin" or "said plurality of elevator pins."

1.6. With respect to claim 2, it is unclear what is meant by the term, "across at least one of the workpiece transport direction or directions."

1.7. With respect to claim 2, applicant improperly recites a step in a process, "the at least one workpiece is made to glide..." within an apparatus claim.

1.8. With respect to claim 4, the terms "at least one upper member" and "at least one lower member" in lines 9-10 lack antecedent basis within the claim.

II. Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claim(s) 1-6 is/are rejected under 35 U.S.C. 103(a) as being unpatentable over AKAO (JP 11-347779 A) in view of OSTENDARP (US 6,220,056 B1).

1.1. With respect to claim 1, AKAO teaches a pair of transport stages (22)/(23), elevator pins (25), rotating mechanism (24), and the workpiece transferred from the upper to lower member (Fig. 11 and 15). AKAO fails to teach employing fluidic expulsion to

float the workpiece. OSTENDARP teaches using fluidic expulsion to float the workpiece (Fig. 1). It would have been obvious to one of ordinary skill in the art to modify AKAO with the fluidic expulsion of OSTENDARP in order to minimize the chance of contamination or damage to the workpiece.

1.2. With respect to claim 2, AKAO teaches a plurality of transport stages (22)/(23), elevator pins (25), rotating mechanism (24), the workpiece transferred from the upper to lower member (Fig. 11 and 15) and second rotating mechanism downstream (Fig. 18). AKAO fails to teach employing fluidic expulsion to float the workpiece. OSTENDARP teaches using fluidic expulsion to float the workpiece (Fig. 1). It would have been obvious to one of ordinary skill in the art to modify AKAO with the fluidic expulsion of OSTENDARP in order to minimize the chance of contamination or damage to the workpiece.

1.3. With respect to claim 3/1 and 3/2, AKAO additionally teaches a vibration dampening material (25).

1.4. With respect to claim 4, AKAO teaches a pair of transport stages (22)/(23), and rotating mechanism (24). AKAO fails to teach employing fluidic expulsion to float the workpiece and transferring from one stage to the other by reduction, termination or reversal. OSTENDARP teaches using fluidic expulsion to float the workpiece and transferring from one stage to the other by reduction, termination or reversal (Fig. 1-3). It would have been obvious to one of ordinary skill in the art to modify AKAO with the fluidic expulsion and transferring mechanism of OSTENDARP in order to minimize the chance of contamination or damage to the workpiece.

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1.5. With respect to claim 5/1, 5/2, 5/4, 6/3/1, and 6/3/2, AKOA additionally teaches permitting horizontal and vertical movement.

III. Conclusion

1. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.
2. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Charles N. Greenhut whose telephone number is (571) 272-1517. The examiner can normally be reached on 7:30am - 4:00pm EST.
3. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen D. Lillis can be reached on (571) 272-6928. The fax phone number for the organization where this application or proceeding is assigned is (571) 273-8300.
4. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CG



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